



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,033	08/20/2003	Keiichiro Ishihara	03500.014893.1	5330
5514	7590	09/10/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			PHAN, JAMES	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,033

Applicant(s)

ISHIHARA, KEIICHIRO

Examiner

James Phan

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5 and 10-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5,10-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/696,000.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/20/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/696,000, filed on 10/26/2000.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 8/20/03 has been considered by the examiner. ***Claim Rejections - 35 USC § 112***

Claims 2-3, 5, and 10-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claim 5 recites "wherein at least one surface of said sagittal asymmetric change surfaces has an inflection point on one side of the optical axis in the meridional direction" (last paragraph). This broad limitation also covers (1) wherein at least one surface of said sagittal asymmetric change surfaces has an inflection point in the meridional (main scanning) direction on one side of the optical axis in the meridional direction or (2) wherein in at least one surface of said sagittal asymmetric change surfaces the curvatures in the meridional (main scanning) direction have an inflection point. Therefore, the broad limitation contains a new matter because it is not fully supported by the original disclosure. The original disclosure, page 6, lines 8-12, states "in at least

one surface of said sagittal asymmetric change surfaces **the curvatures in the sagittal direction have an inflection-point** (the examiner emphasis) only on one side in the meridional direction with respect to the optical axis" (also, see page 8, lines 20-24, and page 28, lines 4-14).

Claim Rejections - 35 USC § 112

Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12 and 13 recite the limitation "said sagittal deformation surfaces" in line 2. There is insufficient antecedent basis for this limitation in the claim. Should "modification" in claim 11, line 3, be changed to --deformation--?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 3, 5 and 10-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiraishi et al.

In re claims 5, 10 and 21 Shiraishi et al discloses an image forming apparatus such as a color printer having an optical scanning device. The optical scanning device comprises:

at least a light source (3Y) including a plurality of light emitting regions (3Ya and 3Yb) for emitting a plurality of light beams;

deflecting means (5) for deflecting the plurality of light beams;

entrance optical means (7Y) for guiding the light beams emitted from the light source to the deflecting means;

and scanning optical means (21) for forming an image of deflected light beams on a surface to be scanned (58); the scanning optical means comprises a plurality of sagittal asymmetric change surfaces (incident and emission surfaces of lenses 30a and 30b) in which curvatures in the sagittal (sub-scanning) direction change on asymmetric basis in the meridional (main scanning) direction with respect to the optical axis of the scanning optical means. See Figs. 2, 16, 24, 32 and 40 and the accompanying text.

In re claims 2 and 11 see at least incident and emission surfaces of lenses 30a in Figs. 16 and 24, respectively.

In re claims 3 and 12 Figs. 16 and 24 show the curvatures in the sagittal (sub-scanning) direction at respective positions in the meridional (main scanning) direction with respect to the optical axis become smaller on the side opposite to the light source side (see left part of the curve/graph in each Figures).

In re claim 14 see Figs. 32 and 40, right side of the curves/graphs (light source side).

In re claim 19 the image forming apparatus comprises a photosensitive body (58Y), a developing unit (62), a transfer unit (64), and a fixing unit (84). See column 12, lines 38, 45, 53, and column 13, line 46.

In re claim 20 a printer controller defined in the claim is inherently disclosed because it is a necessary component for a printer.

Conclusion

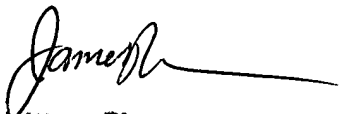
None of the cited references teaches or fairly suggests the claimed invention defined in claims 13 and 15-18.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Phan whose telephone number is (571) 272-2317. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phan, J.
Aug. 13, 2004


James Phan
Primary Examiner